



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,170	07/20/2001	Howard Taitel	04899-058001	1865

959 7590 07/14/2005

LAHIVE & COCKFIELD, LLP.
28 STATE STREET
BOSTON, MA 02109

EXAMINER

COBY, FRANTZ

ART UNIT	PAPER NUMBER
----------	--------------

2161

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

87

Office Action Summary

Application No.

09/910,170

Applicant(s)

TAITEL, HOWARD

Examiner

Frantz Coby

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This is in response to Applicant's amendment filed on April 19, 2005 in which claims 1, 10 were amended.

Status of Claims

Claims 1-42 are pending.

After further search and reconsideration of the present Application, the Examiner has found new reference U.S. Patent no. 6,901,579 issued to Suguta that reads on the claims (Claims 1-42). In view of the newly found reference, the indication of allowable subject matter is withdrawn and a new ground of rejection is set forth below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9, 36-37 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 8, 9, recite the limitation "generating code that is capable of real-time execution based on the critical portions of the model"; however, silent as to what is realized when the identified portion is non-critical. This recitation and omission in the claims render them indefinite since when the computer method identifies portions

Art Unit: 2161

that are non-critical for the identifying step, the step of generating code is not realized, leading to no transformation. What is left in the claims, in that case scenario is the step of "identifying portions of a model as being non-critical to a real-time execution of the model" which becomes a single step claim that renders claims 1, 8 and 9 vague and indefinite.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for

achieving the stated property (result) while the specification discloses at most only those known to the inventor.

As per 16, claim 16 recite a single means, such as a graphical user interface" to receive user inputs. This single means render the claim indefinite.

In particular, claim 16 recites, "A system comprising a graphical interface (GUI) adapted to receive user inputs to specify components of a model". So far the claim is simply providing a GUI, which is a means for receiving user inputs. Although the claim states that the components containing a first subset and second subset of sections, these differences are only found in the nonfunctional descriptive material and do not alter how the GUI is adapted to receive user inputs to specify components of a model. In other words, the descriptive material does reconfigure the GUI to receive user inputs. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, See *In re Gullack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ 1031 (Fed. Cir. 1994).

As per claims 17-23, these claims are at least rejected for their dependencies on the rejected claim 16 above. They are therefore rejected as set forth above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2161

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Suguta
U.S. Patent no. 6,901,579.

As per claims 1, 8 and 9, Suguta discloses a computer implemented method and program including processor for identifying portions of model that are critical or non critical to a real time execution by providing an automatic object-oriented programming language program generation apparatus for automatically developing part of a program for improving productivity in developing the program using an object-oriented programming language, an automatic generation method of the program, and a storage medium for storing the method of the program (See Suguta Col. 1, lines 11-17). In particular, Suguta discloses the claimed limitations of “generating code that is capable of real-time execution based on the critical portions of the model” is capable of real-time execution is realized as automatic generation of a copy constructor in an object-oriented programming language program which enables duplication of an object. Conventionally, such a program as shown in FIG. 2C must be made by a user, Since Suguta allows automatic generation of source codes, generation of codes that is capable of real-time execution is realized (See Suguta Col. 2, lines 40-51).

As per claims 2-7, most of the limitations of these claims have been note in the rejection of claims 1,8 and 9 above. They are at least rejected for their dependencies, directly or indirectly, on claims 1, 8 and 9.

As per claims 10-15, most of the limitations of these claims have been note in the rejection of claims 1,8 and 9 above especially, the aspect of "generating software code". In addition, Suguta discloses the claimed feature of "a code generator" as a program generation unit (See Suguta Figure 3, component 5; Col. 5,lines 9-67), A GUI; post processing unit sections; linking codes through inter-process communication links; applying software to generate codes and receiving output form the code via inter process link (See Suguta Figure 3; Col. 6, lines 30-38)

As per claims 16-23, most of the limitations of these claims have been note in the rejection of claims 1,8, 9 and 10-15 above especially, the aspect of "automatic generation of software code". In addition, Suguta discloses "a system comprising a graphical user interface (GUI) adapted to receive user inputs to specify components of a model, the components containing a first subset of sections designated as post-processing elements of a model and second subset of sections designated as core elements of the model" (See Suguta Figure 4; Col. 6, lines 30-56); "essential computer components (See Suguta Figure 4 and corresponding text); high level computer programming as C++ including compiler(See Suguta Col. 6, line 56-Col. 7, line 31).

As per claims 24-29, all the limitations of these claims have been noted in the rejection of claims 1-23 above. They are therefore rejected as set forth above.

As per claims 30-33, Suguta discloses "a processor and a memory configured to specify block diagram model" (See Suguta Title, Abstract), the block diagram model including data having internal pre-defined data storage classes and external custom data storage classes (See Suguta Figures 3-7 and corresponding text); and Suguta discloses the claimed limitations of "generate software source code for the block diagram model with a code generator using the internal predefined data storage classes and the external custom data storage classes" by providing methodology for generation of source code from classes (See Suguta Col. 2, line 40-Col. 3, line 19).

As per claims 31-33, most of the limitations of these claims have been noted in the rejection of claim 30 above. In addition, Suguta provides computer system that incorporates processor and memory that is usable as a personal computer, single computer and can as well be connected into a computer network (See Suguta Figure 4 and corresponding text).

As per claims 34-42, all the limitations of these claims have been noted in the rejection of claims 1-33. They are therefore rejected as set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suguta U.S. Patent no. 6,901,579.

Claim 16 recite "a system comprising a graphical interface (GUI) adapted to receive user inputs to specify components of a model". So far the claim is simply providing a GUI, which is a means for receiving user inputs. Although the claim states that "the components containing a first subset and second subset of sections, these differences are only found in the nonfunctional descriptive material and do not alter how the GUI is adapted to receive user inputs to specify components of a model. In other words, the descriptive material does reconfigure the GUI to receive user inputs. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, See *In re Gullack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ 1031 (Fed. Cir. 1994).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz Coby whose telephone number is 571 272 4017. The examiner can normally be reached on Monday-Saturday 3:00PM-10:30PM.

Art Unit: 2161

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571 272 4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 9, 2005


FRANTZ COBY
PRIMARY EXAMINER